

Report to the Committee on Armed Services, House of Representatives

December 2020

# DEFENSE HEALTH CARE

Efforts to Ensure
Beneficiaries Access
Specialty Care and
Receive Timely and
Effective Care

Accessible Version

Highlights of GAO-21-143, a report to the Committee on Armed Services, House of Representatives

# Why GAO Did This Study

DOD is responsible for ensuring that beneficiaries have access to specialty care for conditions that, while not life-threatening, require immediate attention, as well as for ensuring that beneficiaries receive timely and effective care for certain routine or other services.

A report accompanying the National Defense Authorization Act for Fiscal Year 2020 included a provision for GAO to review the quality of health care in the MHS. This report examines (1) the timeliness with which beneficiaries access specialty care at MTFs through urgent referrals and DOD's efforts to monitor access, and (2) DOD's use of quality measures to monitor and improve the rates of timely and effective care received by beneficiaries at MTFs.

GAO examined relevant policies, national DOD referral data (a total of 16,754 urgent referrals) for a 1-year period ending August 2019, and the most recent available quality measure data (April 2020). GAO interviewed officials from five MTFs, selected for variation in military services, geography, provision of select specialty services, and use of the electronic health record system.

View GAO-21-143. For more information, contact Debra A. Draper at (202) 512-7114 or draperd@gao.gov.

### December 2020

# **DEFENSE HEALTH CARE**

# **Efforts to Ensure Beneficiaries Access Specialty Care and Receive Timely and Effective Care**

# What GAO Found

The Department of Defense (DOD) has a general expectation that its health care beneficiaries, upon receiving an urgent referral to see a specialist, will access that specialty care in 3 days or less. GAO's analysis of 16,754 urgent referrals at military treatment facilities (MTF) shows that DOD beneficiaries accessed specialty care services in 3 days or less for more than half of the urgent referrals. About 9 percent of the urgent referrals involved beneficiaries waiting 3 weeks or longer to be seen. According to DOD officials, some beneficiaries may have waited longer than 3 days due to factors such as patient preference, appointment availability, or waiting for lab results. Time to access care varied by specialty, with beneficiaries urgently referred to ophthalmology generally seeing a specialist the fastest, and those urgently referred to mental health and oncology generally waiting the longest.

According to DOD officials, MTFs are responsible for monitoring beneficiaries' access to specialty care through urgent referrals. GAO found that the monitoring processes used varied by MTF and specialty care clinic at the five selected MTFs that GAO reviewed. For example, officials from one MTF told GAO they centrally manage all urgent referrals using a daily report to address any delays, while officials from another MTF told GAO that individual specialty care clinics are responsible for managing their own urgent referrals. DOD officials acknowledged such variation and MTFs have been directed to centralize their referral management and monitoring processes—an effort that is currently underway.

GAO found that DOD monitors the rates at which beneficiaries receive timely and effective care, in part, through 10 outpatient health care quality measures. These measures allow DOD to make comparisons to civilian health care systems, and they are reviewed by various DOD groups at least quarterly. However, DOD officials told GAO that since October 2017, they have been unable to monitor nine of the 10 measures for MTFs using Military Health System (MHS) Genesis, DOD's new electronic health record system. According to the officials, DOD's current data warehouse—a system that stores some MHS Genesis data and can be used by MTFs to create reports on quality measures—is not capable of producing accurate reports for those measures. DOD officials told GAO they expect to implement a new data warehouse by the end of 2020. DOD officials also said they are importing data related to quality measures into another system used for quality monitoring; however, DOD does not have a targeted date for completing these data imports.

Until these actions are fully implemented, groups responsible for monitoring quality care will continue to lack the data needed to offer assurance that the growing number of MTFs using MHS Genesis are providing beneficiaries with timely and effective care that will lead to better health outcomes. A draft of this report recommended that DOD establish a timeline to complete importing the quality measure-related data from MHS Genesis into DOD's system used for quality monitoring. In its review of the draft, DOD concurred with the recommendation and established a timeline for importing the data, to be available in DOD's system no later than May 2021. After reviewing the information DOD provided, GAO removed the recommendation from the final report.

United States Government Accountability Office

# Contents

Letter		1
	Background Beneficiaries Accessed Specialty Care within 3 Days for More	7
	than Half of Urgent Referrals; DOD Monitors Access through a Variety of Processes  DOD Uses Quality Measures to Monitor and Improve Care; DOD	10
	Established a Timeline to Address Gaps in Monitoring Agency Comments and Our Evaluation	18 27
Appendix I: Military Health System (	Core Dashboard Measures and the Organizations That Maintain Them	28
Appendix II: Analysis of Urgent Card (MTF)	diology and Orthopedic Referrals at Selected Military Treatment Facilitie	es 36
Appendix III: Comments from the De	epartment of Defense	39
Appendix IV: GAO Contact and Star	ff Acknowledgments	43
Appendix V: Accessible Data		44
	Data Tables Agency Comment Letter	44 48
Tables		
	Table 1: Selected Department of Defense (DOD) Military Treatment Facilities (MTF) Included in Review Table 2: Timely and Effective Outpatient Quality Care Measures Found on the Military Health System (MHS) Core	3
	Dashboard, As of September 2020  Table 3: Examples of Efforts to Improve Beneficiaries' Receipt of Timely and Effective Care Reported by Selected Military	19
	Treatment Facilities (MTF), since Fiscal Year 2017 Table 4: Military Health System (MHS) Core Dashboard of 59 Measures by Organization That Maintains Them and	23
	Public Reporting Locations, as of September 2020 Table 5: All Cardiology and Orthopedic Urgent Referrals for Which Data Did Not Include Information to Confirm Whether	30

	Beneficiaries Had Seen a Department of Defense (DOD) Specialist, by Selected Military Treatment Facilities (MTF), Sept. 1, 2018 – Aug. 31, 2019	36
Figures		
	Figure 1: Amount of Time It Took Beneficiaries to Access Specialty Care through Urgent Referrals, by Type of Specialty Care in All Domestic Military Treatment Facilities, Sept. 1, 2018 – Aug. 31, 2019	12
	Figure 2: Amount of Time It Took Beneficiaries to Access Specialty Care through Urgent Referrals for Cardiology, Oncology and Orthopedics Nationally and at Four Selected Military Treatment Facilities (MTF), Sept. 1,	12
	2018 – Aug. 31, 2019 Figure 3: Rates of Beneficiaries Receiving Timely and Effective Care at Military Treatment Facilities (MTF) Compared to	13
	National Median, April 2020 Figure 4: Rates of Beneficiaries Receiving Timely and Effective Care at Selected Military Treatment Facilities (MTFs)	21
	Compared to National Median, April 2020 Accessible Data for Figure 1: Amount of Time It Took Beneficiaries to Access Specialty Care through Urgent Referrals, by Type of Specialty Care in All Domestic Military Treatment Facilities, Sept. 1, 2018 – Aug. 31, 2019	22
	Accessible Data for Figure 2: Amount of Time It Took Beneficiaries to Access Specialty Care through Urgent Referrals for Cardiology, Oncology and Orthopedics Nationally and at Four Selected Military Treatment Facilities (MTF), Sept. 1, 2018 – Aug. 31, 2019	45
	Accessible Data for Figure 3: Rates of Beneficiaries Receiving Timely and Effective Care at Military Treatment Facilities (MTF) Compared to National Median, April 2020	46
	Accessible Data for Figure 4: Rates of Beneficiaries Receiving Timely and Effective Care at Selected Military Treatment Facilities (MTFs) Compared to National Median, April 2020	47

# **Abbreviations**

DHA Defense Health Agency
DOD Department of Defense
EHR electronic health record

HEDIS Healthcare Effectiveness Data and Information Set

MHS Military Health System MTF military treatment facility

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December 22, 2020

The Honorable Adam Smith Chairman The Honorable Mac Thornberry Ranking Member Committee on Armed Services House of Representatives

The Department of Defense's (DOD) Military Health System (MHS) offers a full range of health care services to more than 9 million eligible beneficiaries through TRICARE, its regionally structured health care program administered by the Defense Health Agency (DHA).¹ DHA is responsible for supporting the delivery of integrated, affordable, and high quality health services to beneficiaries. Beneficiaries may receive primary and specialty health care services from the department's direct care system of 37 hospitals and 373 ambulatory care and occupational health clinics in the United States, referred to as military treatment facilities (MTF), or through private sector care, a network of civilian providers.²

Ensuring that beneficiaries have access to quality health care is particularly important as DHA undergoes two significant transitions: (1) assuming the administration and management of MTFs, as authorized by the National Defense Authorization Act for Fiscal Year 2017, as amended, and (2) deploying a new electronic health record (EHR) system, MHS Genesis, designed to standardize the EHR throughout DOD and replace existing (legacy) EHR systems.

In 2014, the Secretary of Defense ordered a comprehensive review of the MHS that found, among other things, considerable variation in the quality of care delivered.<sup>3</sup> It is important that the MHS provides good quality care

<sup>&</sup>lt;sup>1</sup>Eligible beneficiaries include active duty personnel and their dependents, medically eligible National Guard and Reserve servicemembers and their dependents, and retirees and their dependents and survivors. Active duty personnel include Reserve component members on active duty for at least 30 days.

<sup>&</sup>lt;sup>2</sup>DOD previously referred to private sector care as its purchased care system.

<sup>&</sup>lt;sup>3</sup>Department of Defense, *Final Report to the Secretary of Defense, Military Health System Review* (August 2014).

that is safe and timely. Such care includes timely access to specialty care through urgent referrals, such as to cardiology for chest pains, and certain routine or other services, such as cancer screenings and wellness visits, that evidence indicates leads to better health outcomes. Urgent referrals are made to specialty care for care that, while not life-threatening, requires immediate attention.<sup>4</sup> According to DOD officials, the expectation is that this specialty care is generally provided within 72 hours (3 days), although referring providers are expected to use their clinical judgment to indicate how quickly beneficiaries should receive these services. To ensure beneficiaries receive timely and effective care for routine or other services and have access to specialty care when needed, DOD collects data on various health care quality measures—standard, evidence-based metrics used to quantify health care processes and other aspects of care.

House report 116-120, accompanying the National Defense Authorization Act for Fiscal Year 2020, included a provision for GAO to review the quality of health care in the MHS. This report examines:

- the timeliness with which beneficiaries access specialty care at MTFs through urgent referrals, and DOD's efforts to monitor such access; and
- 2. DOD's use of health care quality measures to monitor and improve the rates of timely and effective care received by beneficiaries at MTFs.

To obtain facility-level perspectives for both objectives, we selected five MTFs for variation by branch of military service, geography, and specialty care clinic availability. Among these five, one MTF was from an enhanced multi-service market, and another was part of the first phase of the MHS Genesis deployment.<sup>5</sup> We interviewed MTF officials involved in referral management and clinical quality measurement, as well as DOD providers responsible for providing urgent specialty care and timely and effective care, to beneficiaries at each of the five MTFs. See table 1 for the

<sup>&</sup>lt;sup>4</sup>In addition to urgent referrals, other referral priorities include routine referrals, which are generally for stable patients whose conditions are not expected to deteriorate over time; stat referrals, which are used when a medical condition is threatening to life, limb, or sight, and requires immediate medical treatment or immediate efforts to lessen suffering; and preoperative referrals, which are used for care required before surgery.

<sup>&</sup>lt;sup>5</sup>Multi-service markets are geographic areas where at least two medical hospitals or clinics from different services have overlapping service areas. There are 15 multi-service markets around the world, 11 of which are in the United States. Six of the multi-service markets are considered 'enhanced' because of several factors, including overall size, medical mission, and graduate medical education capacity.

selected MTFs. Perspectives obtained from these MTFs cannot be generalized to other MTFs.

Table 1: Selected Department of Defense (DOD) Military Treatment Facilities (MTF) Included in Review

DOD Military Treatment Facility	Location
88th Medical Group	Wright-Patterson Air Force Base, OH
Madigan Army Medical Center	Joint Base Lewis-McChord, WA
Naval Medical Center San Diego	San Diego, CA
Walter Reed National Military Medical Center	Bethesda, MD
Womack Army Medical Center	Fort Bragg, NC

Source: GAO. | GAO-21-143

Note: The MTFs were selected for variation by branch of military service, geography, and specialty care clinic availability. Further, one MTF was selected to represent an enhanced multi-service market (multi-service markets are geographic areas where at least two medical hospitals or clinics from different services have overlapping service areas; some of these markets are considered 'enhanced' because of factors such as overall size and graduate medical education capacity). Another MTF was selected to represent the first MTFs to use Military Health System Genesis, DOD's new electronic health record system.

To examine the timeliness with which beneficiaries access specialty care at MTFs through urgent referrals, we obtained nationwide urgent referral data from DHA for the period from September 1, 2018, through August 31, 2019. Specifically, we obtained the last full year of data before MHS Genesis was implemented at additional MTFs in September 2019. We focused our analyses on referrals where, based on the data, we determined a beneficiary had seen a DOD specialist. We excluded urgent referral data for MTFs using MHS Genesis, which included one of the five selected MTFs, as we determined these data were not sufficiently reliable for reporting purposes, as discussed in our report. Finally, we excluded any data that were missing or incomplete. To assess the reliability of these data, we interviewed knowledgeable agency officials and conducted electronic data testing for missing data, outliers, or obvious errors; we found the data sufficiently reliable for our reporting purposes. These methodological steps yielded a dataset of 16,754 urgent referrals

to 14 outpatient specialty care clinics in 280 MTFs in the United States for the 1-year period.<sup>6</sup>

We analyzed the nationwide urgent referral data for all MTFs that used the legacy EHR system and referral data for the four selected MTFs.

- For the 14 specialty care clinics at MTFs that used the legacy EHR system, we analyzed referral data for the 16,754 urgent referrals to determine how long it took beneficiaries to access urgent specialty care in the direct care system overall by calculating the elapsed time from the date the referral was ordered to the date of the beneficiary's initial appointment with a DOD specialist; we also analyzed the data by type of specialty care clinic and source of the referral. We compared our analysis of data on urgent referrals to DOD's expectation that urgent specialty care should generally be provided within 3 days.
- Of the 16,754 urgent referrals, we then identified those from the four selected MTFs that used DOD's legacy EHR system and that were for the top three specialty care clinics with the highest proportions of urgent referrals. This resulted in a subset of 1,290 urgent referrals (183 cardiology, 45 oncology, and 1,062 orthopedic). To understand why some beneficiaries who were urgently referred to specialty care may have taken longer than 3 days to be seen, we used a purposeful stratified sampling procedure to select a nongeneralizable sample (96) of the 1,290 urgent referrals from the three clinics. We chose the sample size to reflect the low-to-high distribution of the number referrals by clinic (4 oncology, 8 cardiology, and 12 orthopedic) at each of the four MTFs. We then randomly selected referrals from each quartile of the number of days elapsed from when the urgent referral was made to when a beneficiary was seen by a DOD specialist for each clinic. We collected additional information about

We analyzed all referrals prioritized in DOD's legacy EHR system as (1) as soon as possible-ASAP, (2) 24 hours, (3) 48 hours, (4) 72 hours, and (5) today. Our analysis included 280 of the 410 MTFs in the United States, because not all MTFs have all or some of the outpatient specialty care clinics. We excluded referrals to specialty care clinics for diagnostic and therapeutic services, such as imaging and laboratory testing, since clinical determinations are not determined by providers during those visits.

<sup>&</sup>lt;sup>6</sup>The following 14 specialty care clinics were included in our review: (1) cardiology, (2) dermatology, (3) gastroenterology, (4) gynecology, (5) mental health, (6) neurology, (7) obstetrics, (8) oncology, (9) ophthalmology, (10) orthopedics, (11) otolaryngology, (12) physical therapy, (13) surgery, and (14) urology.

these referrals from officials from the four selected MTFs, who obtained the information from the legacy EHR system.

To describe efforts to monitor access to specialty care through urgent referrals, we reviewed relevant DOD policies and documents on the process for managing referrals to specialty care. We also interviewed DHA officials and officials from the five selected MTFs about referral management.

To examine DOD's use of health care quality measures to monitor and improve rates of timely and effective care received by beneficiaries at MTFs, we examined the quality measures included as of September 2020 in the MHS Core Dashboard, which DOD uses to assess care provided in MTFs. We focused our review on measures we identified as related to timely and effective care for all services. To determine our criteria for identifying measures as related to timely and effective care, we reviewed prior GAO reports and documents from DOD and organizations that measure or monitor health care quality in the United States, such as the Institute for Healthcare Improvement and the Centers for Medicare & Medicaid Services.

Based on our review of these documents, we defined timely and effective care measures as measures that assess whether patients received specific steps or processes of care that have been shown to lead to better health outcomes, such as certain cancer screenings. We applied our criteria to DOD's technical specifications for the MHS Core Dashboard measures and determined which measures satisfied our criteria. Because the majority of timely and effective measures included in the MHS Core

<sup>&</sup>lt;sup>7</sup>See Department of Defense, Assistant Secretary for Defense, Health Affairs Policy 11-005. For documents on DOD's referral management process, see, for example, Department of Defense, DHA-Interim Procedures Memorandum 18-001, *Standard Appointing Processes, Procedures, Hours of Operation, Productivity, Performance Measures and Appointment Types in Primary, Specialty, and Behavioral Health Care in Medical Treatment Facilities (MTFs),* and TRICARE Operations Manual 6010.59-M, April 1, 2015, Ch. 8, Section 5: *TRICARE Prime and TRICARE Select Referrals.* 

<sup>&</sup>lt;sup>8</sup>The measures on the Core Dashboard are updated periodically. As of September 2020, the Core Dashboard contained 59 measures.

<sup>&</sup>lt;sup>9</sup>The Institute for Healthcare Improvement is a not-for-profit organization that uses assessments of quality measures to develop and promote innovative approaches to improving patient care. The Centers for Medicare & Medicaid Services is an agency within the U.S. Department of Health and Human Services that oversees health care programs, including Medicare and Medicaid.

Dashboard assess outpatient care, we focused on outpatient measures. <sup>10</sup> We identified 10 measures related to timely and effective outpatient care and reviewed DHA data from April 2020, the most recent data available, for these measures for all MTFs that use DOD's legacy EHR system in aggregate and at four of our five selected MTFs. Data for nine of 10 measures were not available for the MTFs using MHS Genesis, including our fifth selected MTF, so we excluded this facility from our data analysis. <sup>11</sup>

### In addition, we:

- interviewed DOD officials responsible for monitoring the quality measures, including officials from DHA; the military services' medical offices; the five selected MTFs; and two established market offices that oversee two of the selected MTFs.
- gathered information about clinical quality measurement processes and procedures, including ongoing and potential changes related to the organizational transition of MTFs to be administered by DHA. As part of these efforts, we collected written responses from our five selected MTFs about their monitoring activities and improvement efforts related to the timely and effective care measures since fiscal year 2017.
- assessed DOD's monitoring and improvement activities against DHA operating procedures related to clinical quality measurement.<sup>12</sup>

We conducted this performance audit from August 2019 to December 2020 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe

<sup>&</sup>lt;sup>10</sup>Based on our criteria, only one inpatient measure addressed timely and effective care—primary Cesarean-section. This measure examines the percentage of first-time Cesarean-section deliveries without a hysterectomy per 1,000 deliveries, excluding deliveries with complications, such as breech procedure or preterm delivery, and deliveries of twins and other multiples.

<sup>&</sup>lt;sup>11</sup>Because MTFs offer different services, the MTFs represented in each measure vary slightly. The data we reviewed for these measures only included TRICARE Prime members who were enrolled to receive primary care from a provider at an MTF.

<sup>&</sup>lt;sup>12</sup>We reviewed the DHA Procedures Manual number 6025.13, Clinical Quality in the Military Health System.

that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

# Background

# Urgent Referrals for Specialty Care Services and Referral Management

Beneficiaries enrolled in TRICARE Prime, DOD's managed care plan, must generally obtain referrals for their specialty care. <sup>13</sup> For the purposes of this report, when discussing beneficiaries urgently referred to specialty care, we are referring to TRICARE Prime beneficiaries. Generally, MTFs have first priority for providing beneficiaries with specialty care. If the MTF does not have the capability or capacity to provide the needed care or cannot provide it within the timeframe established by TRICARE's access to care standards, then the care is referred to private sector care. <sup>14</sup> Referrals to specialty care may be made by a beneficiary's assigned primary care manager either at an MTF or within the civilian provider network, or by another provider as needed (such as by a provider in an Emergency Department).

For urgent referrals, or referrals where a provider determines, in their clinical judgement, that the beneficiary generally needs specialty care within 3 days, DOD officials told us that the referring provider is expected to coordinate with the consulting provider in the specialty care clinic to which the beneficiary is referred to discuss the beneficiary's need. While this expectation had not been documented as of September 2020, DHA was in the process of doing so.<sup>15</sup> Each MTF is to have a referral management center that is responsible for processing specialty care referrals for its facility; in some MTFs, certain specialty care clinics may

<sup>&</sup>lt;sup>13</sup>Beneficiaries enrolled in TRICARE Select, a self-managed preferred provider plan, do not require referrals for specialty care.

<sup>&</sup>lt;sup>14</sup>TRICARE's access to care standards state that the wait time for an appointment for a well-patient visit or a specialty care referral shall not exceed four weeks; for a routine visit, the wait time for an appointment shall not exceed one week. See 32 C.F.R. § 199.17(p)(5)(ii).

<sup>&</sup>lt;sup>15</sup>As of September 2020, DHA was in the process of drafting a standard operating procedure that documents this expectation. DOD officials said they expected the standard operating procedure to be published by March 2021. One of our selected MTFs developed its own guidance on managing urgent referrals, and the guidance documents the provider to provider communication expectation.

be responsible for processing referrals for their clinics instead of through a centrally managed process. Once the referring and consulting providers discuss the beneficiary's urgent need for specialty care, the MTF's referral management center or the specialty care clinic contact the beneficiary to schedule the appointment.

# Timely and Effective Care Quality Measures

Health care quality measures are standard, evidence-based metrics used to assess the extent to which patients receive health care that increases the likelihood of desired health outcomes and is consistent with professional knowledge. DOD officials said that they use quality measures to establish accountability throughout the MHS, and identify areas where quality improvement is needed.

Specifically, the MHS Core Dashboard (Core Dashboard) is used to assess health care provided at MTFs in the direct care system and includes measures that address each aspect of MHS's stated "Quadruple Aim" goals of better care, better health, lower costs, and improved readiness. (See app. I for a complete list of the Core Dashboard measures, organized by which organization maintains the measure, meaning that the organization makes any necessary updates to its specifications.) DHA has established performance targets for many of the Core Dashboard measures and procedures to provide structure to existing programs that, according to a DHA procedures manual, aim to measure, assure, and improve quality of care in the MHS. The Core

<sup>&</sup>lt;sup>16</sup>In September 2018, we reported on the measures used for the Core Dashboard and how they compared to those used on the dashboard used to assess quality of care in private sector care, and found that, among other things, DOD does not use a common set of measures on these dashboards, and that the measures it does use track a limited range of quality care areas and medical conditions compared to the measures adopted by Medicare and private insurers. We recommended that the MHS should prioritize, as appropriate, selecting quality measures that apply to both direct and private sector care at the provider level and that expand the range of quality measure types and medical conditions. Although DOD concurred with our recommendations, it had not taken action to implement them as of September 2020. See GAO, *Defense Health Care: Expanded Use of Quality Measures Could Enhance Oversight of Provider Performance*, GAO-18-574 (Washington, D.C.: Sept. 17, 2018).

<sup>&</sup>lt;sup>17</sup>See Department of Defense, Defense Health Agency, *DHA Procedures Manual, Clinical Quality in the Military Health System, Volumes 1-7,* DHA-PM 6025.13 (Falls Church, Va.: Oct. 2019).

Dashboard does not contain all of the measures that DOD officials may use to monitor quality care across the MHS.

# Transition of MTF Administration from the Services to DHA

In December 2016, Congress expanded the role of DHA by directing the transfer of responsibility for the administration of each MTF from the Army, Navy, and Air Force (the services) to DHA. By no later than September 30, 2021, the DHA Director is to be responsible for the administration of all MTFs. <sup>18</sup> As of October 2019, DHA had assumed administration and management responsibilities for all MTFs within the United States, but has continued receiving management support from the services through direct support agreements. Through these agreements, the services continue to help MTFs sustain current health care-related activities until DHA reaches its full capabilities for managing MTFs. However, because of the impact of the COVID-19 pandemic on the services and DHA, ongoing MTF transition activities were paused from March 2020 through mid-September 2020.

Under DHA, the majority of MTFs will be organized into 21 health care markets—groups of MTFs in given geographic areas that will operate as systems, sharing patients, staff, budget, and other functions to deliver and coordinate health care. The markets are intended to improve the delivery and coordination of health care services and standardize processes. Each market will report directly to DHA. Remaining MTFs in the continental United States will be organized into smaller markets or will be stand-alone MTFs, and will be administered by an intermediate organization that supports DHA. 19 As of September 2020, four of the 21 health care markets had been established. 20

<sup>&</sup>lt;sup>18</sup>This includes responsibility for budgetary matters, information technology, health care administration and management, and administrative policy and procedure, among other responsibilities. See 10 U.S.C. § 1073c.

<sup>&</sup>lt;sup>19</sup>MTFs outside the continental United States, including those in Hawaii, will be grouped into two Defense Health Regions—Indo-Pacific and Europe—that will report to DHA.

<sup>&</sup>lt;sup>20</sup>The four established markets include the National Capital Region; Jacksonville, Florida; Coastal Mississippi; and Central North Carolina.

# **DOD Information Technology Systems**

In 2017, DHA began replacing existing information technology systems, including legacy EHR systems, with MHS Genesis. MHS Genesis includes a new referral management system that replaces Referral Management Suite, the information technology system primarily used to process and track specialty care referrals since 2008. As of September 2020, MHS Genesis had been deployed to nine MTFs. DOD expects to fully implement MHS Genesis across all MTFs by the beginning of fiscal year 2024.

Beneficiaries Accessed Specialty Care within 3 Days for More than Half of Urgent Referrals; DOD Monitors Access through a Variety of Processes

Beneficiaries Accessed Urgent Specialty Care Services from DOD Specialists within 3 Days for More than Half of Urgent Referrals; Time from Referral to Care Varied by Specialty

Our analysis of DHA referral data for September 2018 through August 2019 shows that beneficiaries urgently referred to specialty care saw a specialist within DOD's general expectation of 3 days of the referral being ordered for 9,697 of the 16,754 referrals (58 percent) made to MTFs using DOD's legacy EHR system.<sup>21</sup>

<sup>&</sup>lt;sup>21</sup>DOD officials told us the expectation is that urgent specialty care is generally to be provided within 72 hours (3 days); however, referring providers are expected to use their clinical judgment to indicate how quickly beneficiaries should receive these services. There is no access to care standard for urgent specialty care appointments.

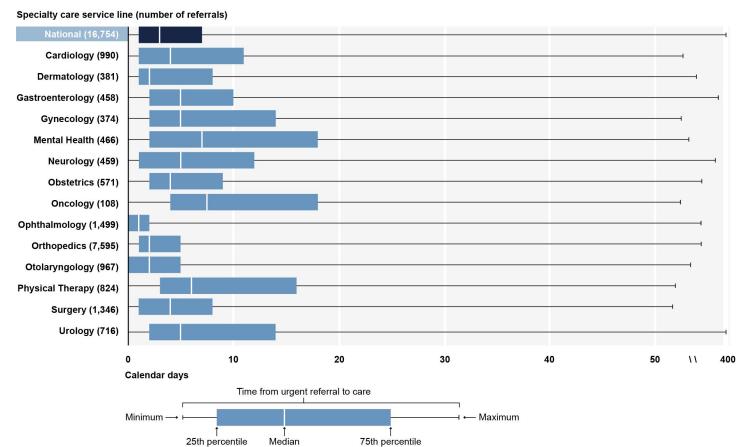
- For 17 percent of these urgent referrals, the beneficiary saw a DOD specialist the same day the referral was made.
- For more than 75 percent of these urgent referrals, beneficiaries were seen in 7 days or less.
- For 9 percent of the urgent referrals, beneficiaries were seen three weeks or longer from the date of their referrals.<sup>22</sup>

Our analysis of the referral data also found variation in the time from when a provider made an urgent referral to when the beneficiary saw a DOD specialist by type of specialty care and source of referral.

Type of specialty care. The time it took beneficiaries to see a specialist from time of urgent referral varied by the type of specialty care for the 16,754 urgent referrals we reviewed. (See fig. 1.) Beneficiaries with urgent referrals to ophthalmology (approximately 9 percent of all urgent referrals) generally saw a DOD specialist the fastest – at least 50 percent of these urgent referrals resulted in beneficiaries seen within 1 day, and 75 percent seen within 2 days. Beneficiaries with urgent referrals to mental health and oncology generally took the longest to be seen – up to 7 days for a beneficiary to see a DOD specialist for 50 percent of urgent referrals, and up to 18 days for 75 percent of urgent referrals. Oncology providers we spoke with at one of the MTFs in our review noted that they often need laboratory results before they see beneficiaries with urgent referrals, which could contribute to the longer times we found.

<sup>&</sup>lt;sup>22</sup>For 93 urgent referrals, beneficiaries were seen in 100 days or more, with the longest taking 392 days to be seen.

Figure 1: Amount of Time It Took Beneficiaries to Access Specialty Care through Urgent Referrals, by Type of Specialty Care in All Domestic Military Treatment Facilities, Sept. 1, 2018 – Aug. 31, 2019



Source: GAO analysis of Defense Health Agency data. | GAO-21-143

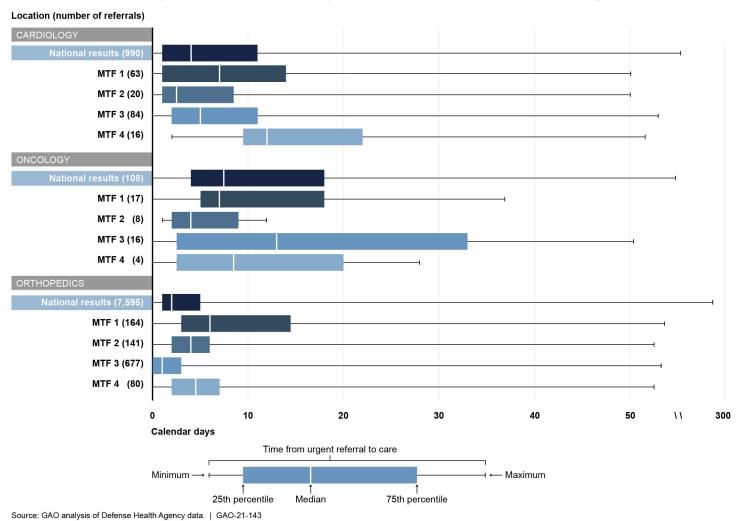
Note: The 16,754 national referrals represent all urgent referrals in which a beneficiary had an encounter with a DOD specialist in a military treatment facility located in the United States, and the facility was using the Department of Defense's existing (legacy) electronic health record system during the requested time period.

We also analyzed a subset of the national data representing 1,290 urgent referrals to three specialty care clinics (cardiology, oncology, and orthopedics) at each of our four selected MTFs. We found that the time it took beneficiaries to see a specialist from time of urgent referral varied across the three specialties. (See fig. 2.)

 Beneficiaries referred to cardiology and orthopedics took longer to be seen at three of the four MTFs for more than half of the 1,245 urgent referrals to these two specialties, compared to the national results for these two specialties. For one MTF, beneficiaries waited almost twice as long to see a DOD cardiologist compared

- to the other three MTFs, although that MTF also had the fewest number of urgent referrals to cardiology.
- Beneficiaries urgently referred to oncology at our four selected MTFs (45 referrals) generally took the longest to be seen compared to cardiology and orthopedics, consistent with the national results for oncology.

Figure 2: Amount of Time It Took Beneficiaries to Access Specialty Care through Urgent Referrals for Cardiology, Oncology and Orthopedics Nationally and at Four Selected Military Treatment Facilities (MTF), Sept. 1, 2018 – Aug. 31, 2019



Note: We analyzed urgent referral data for the top three specialty care clinics (cardiology, oncology, and orthopedic) with the highest proportions of urgent referrals to total referrals. We reviewed these data for four MTFs that we selected, in part, for variation in branch of military service, geography, and specialty care clinic. The national referrals represent urgent referrals in which a beneficiary had an encounter with a DOD specialist in a MTF located in the United States. Further, all urgent referrals

were to MTFs using the Department of Defense's existing (legacy) electronic health record system during the requested time period.

To understand why some beneficiaries urgently referred to specialty care may take longer to be seen, we obtained supplemental information from MTF officials at the four MTFs in our review. Specifically, we obtained and reviewed a nongeneralizable sample of 96 of the 1,290 urgent cardiology, oncology, and orthopedic referrals made to the MTFs during the period we reviewed. In this sample, we found that for 49 (51 percent) of urgent referrals, beneficiaries saw DOD specialists within 3 days, a timeliness rate similar to what we found in our analysis of national referral data.

According to MTF officials at the selected facilities, reasons why beneficiaries were seen beyond DOD's general expectation of 3 days included patient preference and appointment availability. Other reasons officials cited included, for example, waiting for laboratory results, or clinics that were unable to contact a beneficiary to schedule an appointment. Notably, MTF officials told us that, after reviewing the urgent referrals, 16 percent of them were incorrectly prioritized as urgent, and some of the clinics had determined that care could have been provided outside of 3 days. (See app. II for the results of similar analyses we conducted on 71 urgent referrals excluded from our dataset because the referral data did not include information to confirm a beneficiary had been seen by a DOD specialist.)

**Source of referral.** Our analysis of the 16,754 urgent referrals made between September 2018 and August 2019 also shows that the time it took beneficiaries to access urgent specialty care varied slightly if an urgent referral was made by a DOD provider located at the same or a different MTF. Specifically, we found it took up to 2 days for half of urgent referrals to have beneficiaries seen if they were referred and seen by DOD providers at the same MTFs (14,580 urgent referrals), compared to 3 days if the providers were at different MTFs (1,778 urgent referrals).<sup>23</sup>

DOD Monitors Access to Urgent Specialty Care through a Variety of Processes; DOD Has Taken Steps to Address Limitations with MHS Genesis That Impeded Monitoring

DOD officials told us that they monitor beneficiaries' access to specialty care through urgent referrals, and that the processes used to monitor

<sup>&</sup>lt;sup>23</sup>The remaining 396 of the 16,754 urgent referrals were made by network civilian providers to DOD specialists.

such access vary by MTF and specialty care clinic at the five selected MTFs. Limitations associated with DOD's new EHR system and related referral management system initially impeded DOD from monitoring the timeliness of urgent referrals for those MTFs where the new EHR had been implemented. To address this issue, MTFs at those sites used a workaround tool to monitor urgent referrals. However, according to DOD officials, an update to the system in August 2020 addressed the limitations and should enable MTFs to use MHS Genesis to monitor referrals in the referral management system.

**Monitoring of urgent referrals to specialty care.** According to DOD officials, individual MTFs are responsible for monitoring their beneficiaries' access to urgent specialty care.

At the MTF level, referral management centers' staff for all five selected MTFs told us they do not have a separate monitoring process for urgent referrals; rather, these referrals are monitored the same as referrals of all other priorities (e.g., routine, stat). However, we found variation in the processes our selected MTFs used to monitor urgent referrals. For example:

- Referral management center staff at one MTF told us that they
  download a daily report of all referrals. Staff then address any
  delays in the management of urgent referrals, including identifying
  any that have not been acted upon within 24 hours to decide
  whether care should be provided within the direct care system or
  private sector care.
- Referral management center staff from another MTF told us that
  the specialty clinics are responsible for managing all aspects of
  urgent referrals, as the coordination is between each referring
  provider and the consulting provider and clinic.

At the clinic level, we found variation in the extent to which staff monitor urgent referrals to their clinics. For example, officials from the cardiology, oncology, and orthopedic clinics at each of our selected MTFs reported varied results regarding their extent of monitoring the time they take to (1) review, (2) accept or defer, (3) schedule an appointment, and (4) see the beneficiary for urgent referrals. For example, one clinic from an MTF noted that urgent referrals are reviewed daily, while a different clinic from the same MTF said it does not monitor any of these elements.

Further, staff from both the referring clinics and consulting clinics cited challenges managing urgent referrals at their MTFs.<sup>24</sup> For example, staff noted it was difficult to ensure referring and consulting providers communicated about an urgent referral, as expected by DOD, to ensure that the beneficiary's condition was in fact urgent and that the specialty care clinic was able to see the beneficiary within the clinically indicated time frame. Staff from all of the clinics we spoke with emphasized the importance of provider-to-provider communication for urgent referrals. Other cited challenges included:

- variability of the referral management process among clinics within the same MTF;
- urgent referrals sent with incomplete information; and
- urgent referrals that should have been ordered as routine referrals.

DOD officials acknowledged that variation in referral management exists across MTFs. A memorandum from DHA directed MTFs to centralize their referral management processes, which the officials say some MTFs have begun to do.<sup>25</sup> DOD officials also said they plan to require MTFs that are part of any established market to fully centralize their referral management processes beginning in 2021, and they plan to hold trainings on centralization that same year. According to the officials, referral management for each market will run through a centralized referral management center, thus removing the responsibility for managing referrals from individual MTFs and clinics. As part of this effort, DOD officials are currently vetting a standard operating procedure for managing urgent and stat referrals to specialty care services. According to officials, the procedure will be implemented through a pending DOD instruction for managing referrals, expected to be published in March 2021.

**Information system's limitations.** In our review of and subsequent discussions with DOD officials on urgent referral data, we identified

<sup>&</sup>lt;sup>24</sup>Specifically, we spoke with staff from primary care clinics and the Emergency Department at each of our selected MTFs about urgently referring beneficiaries to specialty care. We also talked to staff from specialty clinics at these MTFs about receiving urgent referrals.

<sup>&</sup>lt;sup>25</sup>See Department of Defense, Defense Health Agency, Defense Health Agency-Interim Procedures Memorandum 18-001, *Standard Appointing Processes, Procedures, Hours of Operation, Productivity, Performance Measures and Appointment Types in Primary, Specialty, and Behavioral Health Care in Medical Treatment Facilities (MTFs).* 

limitations associated with DOD's new EHR, MHS Genesis, and its related referral management system, which impeded DOD from monitoring urgent referrals to specialty care through this system until August 2020.

Until that time, MTFs using MHS Genesis had adopted and used a workaround tool—outside of MHS Genesis—to monitor referrals because they could not accurately monitor the time it took beneficiaries to see a specialist at an MTF using the referral management system. <sup>26</sup> For example, the report generated by the system to monitor referrals did not capture the initial appointment associated with the referral. Further, the urgent priority status assigned to a referral was removed if the referral was forwarded, for example, to another MTF official, presenting a potential risk to patient safety acknowledged by MTF and DHA officials.

DOD officials told us that, in response to these limitations, improvements were made to MHS Genesis' referral management system in August 2020 through an update that addressed the limitations we identified. Officials said that the update had been deployed to all MTFs using MHS Genesis at that time. For example, officials explained that with the update forwarded referrals should maintain their urgent priority status. DOD officials also said that they would continue to work with MTFs to ensure that data, such as initial appointments with DOD specialists, are displayed correctly in subsequent reports. Such data will help them to accurately monitor how long it takes beneficiaries to access specialty care through urgent referrals. MTF officials from the selected MTF using MHS Genesis told us that, since the update was deployed, they have achieved 100 percent accuracy of monitoring urgent referrals.

<sup>&</sup>lt;sup>26</sup>Specifically, officials at the selected MTF using MHS Genesis created a workaround tool to monitor urgent referrals. MTF officials said the tool had been shared with the remaining MTFs using MHS Genesis to help ensure that beneficiaries needing urgent care received it

# DOD Uses Quality Measures to Monitor and Improve Care; DOD Established a Timeline to Address Gaps in Monitoring

DOD Uses Established Quality Measures to Monitor and Improve Rates at Which Beneficiaries Receive Timely and Effective Outpatient Care at MTFs

DOD uses a number of established health care quality measures to monitor the rates at which beneficiaries receive timely and effective care at MTFs, and MTFs use these measures to inform their improvement efforts, such as increasing rates of breast cancer screening. In our review of the MHS Core Dashboard's 59 measures that DHA used to assess care in its direct care system as of September 2020, we identified 10 quality measures that DHA uses to monitor rates of timely and effective outpatient care at MTFs; that is, those that measure whether patients received specific steps or processes of care that have been shown to lead to better health outcomes (see table 2). Eight of the 10 timely and effective care measures are Healthcare Effectiveness Data and Information Set (HEDIS) measures, an established set of health care quality measures used by many organizations.<sup>27</sup>

<sup>&</sup>lt;sup>27</sup>HEDIS measures are designed by the National Committee for Quality Assurance, which is a not-for-profit organization that accredits health plans and develops quality standards and performance measures for them. HEDIS measures are used by health plans in the United States to report health care quality. Of the remaining two measures, one measure (tobacco cessation) was created by a not-for-profit physician organization, while DHA created the measure of primary care manager continuity. TRICARE Prime beneficiaries are assigned to a primary care manager who is responsible for overseeing all aspects of their patients' care, including making referrals for specialty care.

Table 2: Timely and Effective Outpatient Quality Care Measures Found on the Military Health System (MHS) Core Dashboard, As of September 2020

Measure number	Quality care measure	Description of measure
1.	Appropriate testing for pharyngitis	Percentage of patients 3 years and older who (1) received a diagnosis of pharyngitis and were prescribed an antibiotic at an outpatient visit and (2) were tested for streptococcus within 3 days of the visit.
2.	Breast cancer screening	Percentage of women aged 52 to 74 who had a mammogram in the previous 27 months.
3.	Cervical cancer screening	Percentage of women aged 24 to 64 who had either cervical cancer screening in the past 3 years or cervical cancer screening and human papillomavirus co-testing in the past 5 years where the woman was 30 years or older at the time of the co-test.
4.	Colorectal cancer screening	Percentage of adults aged 51 to 75 who had colorectal cancer screening at an appropriate interval, dependent upon screening method. <sup>a</sup>
5.	Diabetes HbA1c testing	Percentage of patients aged 18 to 75 with Type 1 or Type 2 diabetes who had at least one hemoglobin A1c test performed during the past 12 months.
6.	Low back pain	Percentage of adults aged 18 to 50 with a primary diagnosis of low back pain who did not have an imaging study (plain X-ray, MRI, or CT scan) within 28 days of diagnosis.
7.	Primary care manager continuity	Percentage of appointments where the patient was seen by his or her assigned primary care manager out of the total number of planned appointments. <sup>b</sup>
8.	Percentage of patients 6 years or older who were hospitalized for treatment of selecte follow-up  Percentage of patients 6 years or older who were hospitalized for treatment of selecte illness diagnoses and who had an outpatient visit, an intensive outpatient visit, or parti hospitalization with a mental health practitioner within 7 days of discharge	
9.	Tobacco cessation	Percentage of tobacco-using patients 18 years or older (or pregnant at any age) that received tobacco cessation counseling during the measurement year.
10.	Well child visits	Percentage of children who reached the age of 15 months during the measurement period and had 6 or more well child visits during the first 15 months of life.

Source: GAO review of MHS Dashboard. | GAO-21-143

Notes: Eight of the 10 timely and effective care measures were created and are maintained by the National Committee for Quality Assurance, a not-for-profit organization that accredits health plans and develops quality standards and performance measures for them. Of the remaining two measures, the primary care manager continuity measure was created by the Defense Health Agency, and the tobacco cessation measure was created by a not-for-profit physician organization.

<sup>a</sup>Colorectal cancer screening types and screening intervals include the following: (1) colonoscopy within the last 120 months, (2) flexible sigmoidoscopy within the last 60 months, (3) CT colonography within the last 60 months, (4) FIT-DNA test within the last 36 months, and (5) fecal occult blood test within the last 12 months.

<sup>b</sup>TRICARE Prime beneficiaries are assigned to a primary care manager who is responsible for overseeing all aspects of their patients' care.

Various groups across DOD are responsible for monitoring these measures. These include MTFs, the services, the markets, and DHA. Most of the officials we spoke with, including those from the services, markets, and our selected MTFs, told us they review these measures on

at least a quarterly, sometimes monthly, basis.<sup>28</sup> Generally, officials reported looking for trends or deviations in the data. The services monitor clinical quality management activities for MTFs who have not yet joined markets, among other responsibilities, until DHA reaches its full management capabilities. In addition to various groups within DOD monitoring beneficiaries' receipt of timely and effective care, quarterly data for eight of the 10 measures are publicly available on an MHS website for beneficiaries so that beneficiaries also can monitor them.<sup>29</sup>

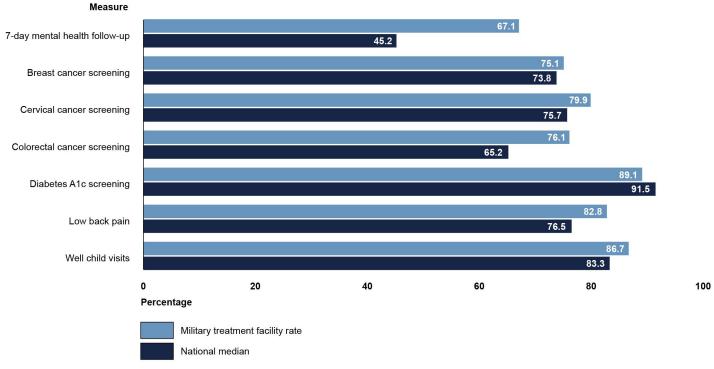
In our review of DHA data from April 2020 for seven timely and effective quality measures that have national medians for civilian health plans similar to TRICARE Prime, we found that MTFs using the legacy EHR system performed better than the benchmark of the national median for six measures (see fig. 3). These MTFs performed slightly worse than the median for diabetes A1c screening. The remaining three measures did not have a national median available as of September 2020.<sup>30</sup>

<sup>&</sup>lt;sup>28</sup>Definitions of the measures are sometimes updated, and DHA has to update its systems to reflect the new definition which can result in missing data for a period of time. For example, DHA told us that data for the 7-day mental health follow-up measure were not available for calendar year 2019 when we initially requested these data, but provided more recent data at a later point in time once their systems had been updated to reflect the new definition.

<sup>&</sup>lt;sup>29</sup>Data from the outpatient tobacco cessation measure are not published on the MHS website, but other measures of tobacco cessation for hospital stays are available. Data from the appropriate testing for pharyngitis measure are not currently available. For the website, see Department of Defense, Military Health System, *MHS Quality, Patient Safety, and Access Information (for Patients),* accessed October 6, 2020, https://www.health.mil/Military-Health-Topics/Access-Cost-Quality-and-Safety/Patient-Portal-for-MHS-Quality-Patient-Safety-and-Access-Information.

<sup>&</sup>lt;sup>30</sup>Because DHA created the primary care manager continuity measure, this measure is not reported in the civilian sector and, thus, has no national benchmark. We also found that the tobacco cessation measure does not have a national benchmark for comparison purposes. For the measure, appropriate testing for pharyngitis, DOD officials told us that its definition was recently updated and, while new data are available, no national benchmark is available yet.

Figure 3: Rates of Beneficiaries Receiving Timely and Effective Care at Military Treatment Facilities (MTF) Compared to National Median, April 2020

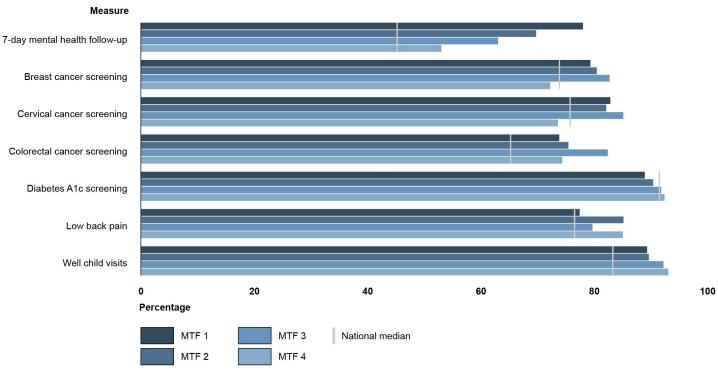


Source: GAO review of Defense Health Agency data. | GAO-21-143

Note: The MTF rate is among beneficiaries enrolled to receive care at MTFs, except for low back pain, which is among beneficiaries having a visit related to low back pain at an MTF. The MTF rate includes all MTFs, including MTFs outside the continental United States, using the Department of Defense's (DOD) existing (legacy) electronic health record system, and excludes any MTF using Military Health System Genesis, DOD's new electronic health record system. The national median is among health plans similar to TRICARE Prime, DOD's managed care plan that report to the Healthcare Effectiveness Data and Information Set (HEDIS). HEDIS measures are used by health plans in the United States to report health care quality.

For the four selected MTFs in our review using the legacy EHR, we found that there were four measures for which all four MTFs scored higher than the national median (see fig. 4). We also observed variation in the rates across the MTFs for all measures, with the most variation occurring in the 7-day mental health follow-up measure. For this measure, all four MTFs had rates greater than the national median (approximately 45 percent); MTFs' rates ranged from 53 to 78 percent.

Figure 4: Rates of Beneficiaries Receiving Timely and Effective Care at Selected Military Treatment Facilities (MTFs) Compared to National Median, April 2020



Source: GAO review of Defense Health Agency data. | GAO-21-143

Note: The national median is among health plans similar to TRICARE Prime, the Department of Defense's managed care plan, that report to the Healthcare Effectiveness Data and Information Set (HEDIS). HEDIS measures are used by health plans in the United States to report health care quality. We reviewed these data for four MTFs that we selected, in part, for variation in branch of military service and geography. Further, the selected MTFs were all using the Department of Defense's existing (legacy) electronic health record system during the requested time period.

Officials at our four selected MTFs using the legacy EHR also reported using data on the timely and effective care measures to identify further opportunities for improvement and to determine whether quality improvement activities were working. Most MTF officials stated that they use the benchmark values on the MHS Core Dashboard to guide decisions as to whether performance for a measure needs improvement. If improvements are needed, officials told us they attempt to identify contributing causes for MTFs not meeting the benchmark.

All four selected MTFs using the legacy EHR reported completing improvement efforts for at least one of the ten timely and effective care measures in the past 4 years. See table 3 for examples of efforts to improve beneficiaries' timely and effective care from each selected MTF.

Example of timely and effective care measure at selected MTF	MTF-identified reasons for performance issue(s)	Improvement effort(s)	Results	
Well child visits (MTF 1)	Families transferring to the MTF were behind schedule for recommended visits  Parents forgot the timing of recommended visits	Provided clinic with a list of new patients to facilitate education about well child visits and immunizations	Percentage of patients with recommended well child visits increased from 84.0 percent in January 2017 to 87.8 percent in February 2020	
	Parents perceived the 9-month visit as less important because it does not include a vaccination	Text messaging sent by clinic staff to remind parents of the need for well child visits	Text messaging efforts were expanded for other preventive care services, such as breast cancer screening	
Breast cancer screening (MTF 2)	Staffing shortages led to decreased outreach efforts; decreased scheduling capacity; limited Saturday appointment availability	Staff from other related clinics helped with patient outreach efforts to schedule screenings Allowed three patients daily to have a walk-in mammogram	Percentage of patients screened for breast cancer improved from 78.1 percent in January 2018 to 81.5 percent in December 2019	
	2.2.2,	Allowed patients to self-refer for a mammogram		
Low back pain (MTF 3)	Improper coding by providers Patients lack awareness of when imaging is necessary	Conducted provider education on proper coding Gave performance feedback to providers on how their departments have scored on the measure through biannual report cards Providers educated patients about	Percentage of adults with a primary diagnosis of low back pair who did not have an imaging study improved from 62.1 percent in October 2016 to 74.0 percent in November 2018	
		managing low back pain and appropriate imaging at outreach events		
Cervical cancer screening (MTF 4)	Incorrect coding for visits Patients were not reminded when they were due for screening Staffing shortages limited number of available appointments	Educated providers on coding guidelines Contacted patients due or overdue for screening to schedule screening while staffing was sufficient	Percentage of patients screened for cervical cancer improved from 71.2 percent in September 2018 to 72.1 percent in December 2018	

Source: GAO review of MTF-reported information. | GAO-21-143

Note: We reviewed these data for four MTFs that we selected, in part, for variation in branch of military service and geography. Further, the selected MTFs were all using the Department of Defense's existing (legacy) electronic health record system during the requested time period.

Notably, officials from all four of our selected MTFs reported that it was challenging to improve primary care manager continuity for beneficiaries at their facilities. While officials acknowledged the importance of provider

continuity, two of four MTFs noted that it is likely lower due to the primary care access standards, among other factors inherent to the MHS.<sup>31</sup> To meet the access-to-care standard of scheduling routine primary care appointments within 7 days, officials said beneficiaries are offered the first available appointments and may choose the time that works best for them, which may be with a different primary care manager than the one to which they are assigned. Two of four MTFs said they work to maintain continuity with the beneficiary's team of providers rather than an individual primary care manager; MTFs reported this is important because primary care managers may have limited time in the clinic due to, for example, residency program schedules, deployment, or time spent seeing patients in the hospital.

Information System Deficiencies Related to Deployment of MHS Genesis Created Gaps in Monitoring Timely and Effective Outpatient Care; DOD Established a Timeline to Address Them

We found that MTFs using DOD's new EHR system, MHS Genesis, cannot collect key quality measure data, thereby limiting their ability to monitor and improve beneficiaries' rates of timely and effective care. Specifically, DOD officials told us they have been unable to monitor most of the 10 timely and effective outpatient care measures at MTFs using MHS Genesis as they have been charged to do under DHA's procedures manual. Since October 2017, when DOD began to deploy the new system, data for nine of 10 timely and effective care measures and patient registry data—such as lists of beneficiaries overdue for screenings—used to monitor and improve care quality have not been readily available for MTFs using MHS Genesis. DHA officials said that these reports, which are typically available in the MHS Core Dashboard, were not available because data from MHS Genesis had not yet been imported into the MHS Core Dashboard's data system.

<sup>&</sup>lt;sup>31</sup>See 32 C.F.R. § 199.17(p)(5) and Health Affairs Policy 11-005.

<sup>&</sup>lt;sup>32</sup>The Department of Defense, Defense Health Agency, DHA Procedures Manual number 6025.13, *Clinical Quality in the Military Health System, Volume 6: Clinical Measurement* states that groups throughout DOD, including DHA, the services, markets, and MTFs have responsibilities for the Clinical Measurement Program. For example, DHA or the services are to monitor clinical measurement at all MTFs and analyze system-level data, and MTFs are to monitor and convey providers with feedback on clinical measurement data.

While staff at the selected MTF using MHS Genesis included in our review reported working to replicate the quality measure data calculations for the eight HEDIS measures using MHS Genesis and its current data warehouse, they said these reports were not accurate.<sup>33</sup> DOD officials said that quality measure data from MHS Genesis' current data warehouse—a system that stores data from MHS Genesis and can be used by MTFs to create reports—is lacking, in part, because the data warehouse is not capable of producing accurate reports for these measures. For example, for preventive care measures, officials at the MTF in our review using MHS Genesis noted that the current data warehouse does not always contain the procedure codes used to determine whether care was provided.

MTF officials also said they found it challenging to link providers to their clinics in the current data warehouse, and that MHS Genesis does not contain the enrollment files needed to produce lists of beneficiaries who are overdue for screenings. MTFs still using the legacy EHR system reported using such lists to conduct systematic outreach to schedule screening appointments. Without lists of patients overdue for screening, providers at MTFs using MHS Genesis have to review individual patient records to identify such patients, a time-consuming effort that at least one facility reported undertaking. As a result, MTFs using MHS Genesis are unable to systematically monitor the extent to which beneficiaries receive timely and effective care and implement any needed improvement efforts, which could lead to fewer beneficiaries getting recommended care, such as timely cancer screenings, potentially resulting in poor health outcomes.

These information system deficiencies have contributed to DHA officials excluding data extracted from MHS Genesis, including data from measures of timely and effective care, from MHS-wide analyses of care quality, because they were "unsuitable for decision-making" purposes, according to some DOD officials. Unless the data improve, as the number of MTFs using MHS Genesis increases, an increasing percentage of MTFs—and beneficiaries—will be excluded from MHS-wide measurement and analyses, which could result in DHA officials making

<sup>&</sup>lt;sup>33</sup>The primary care manager continuity measure is available for MTFs using MHS Genesis; however, officials said that data for other measures are not available in the system used to monitor quality across the MHS. Officials at the selected MTF using MHS Genesis told us they have worked to replicate the measure calculations to the extent possible with current systems, in order to assist providers in monitoring their patient populations. However, according to officials, these data are of limited use because the data were inaccurate.

decisions based on data that are not representative of the entire health system.

According to DHA officials, the agency is taking actions to address the quality care data issues for MTFs using MHS Genesis. Specifically, according to officials, DHA is

- importing data related to quality measures from MHS Genesis into the MHS Core Dashboard's data system so that historical data are available for those MTFs using MHS Genesis. DHA officials reported that they recently completed adding laboratory (e.g., hemoglobin A1c tests), and imaging (e.g., mammography) data to this MHS-wide quality reporting system where officials across DOD can access them. DHA officials said they next plan to import other MHS Genesis data needed to calculate health care measures, such as procedures, into the Core Dashboard data system; however, as of October 2020, DHA had not established a targeted date for completing these data imports.
- planning to implement a new data warehouse for MTFs with MHS Genesis, which will import data from MHS Genesis to support the calculation of measures and produce reports and patient registries for MTFs to use. Officials also acknowledged that MTFs have had challenges accessing data and creating reports using the current MHS Genesis data warehouse, and they said the new data warehouse will have better tools to analyze and visualize data. DHA officials said they expect the new data warehouse to be operational by the end of calendar year 2020.

Until DHA completes these actions, groups responsible for monitoring quality care will continue to lack the data needed to offer assurance that MTFs using MHS Genesis are providing beneficiaries with timely and effective care that will lead to better health outcomes.<sup>34</sup> Those groups also will continue to lack important information needed to identify and respond to quality of care concerns. In December 2020, DOD established a timeline for importing data for each of the measures and target dates for posting the data on the MHS Core Dashboard no later than May 2021 for most measures.

<sup>&</sup>lt;sup>34</sup>One data limitation that will remain after the new data warehouse is implemented is accounting for services received from civilian providers in the private sector care network. DHA officials said they may consider adding private sector care data to MHS Genesis at a later time.

# Agency Comments and Our Evaluation

We provided a draft of this report to DOD for review and comment. DOD's comments are reprinted in appendix III. Our draft report included a recommendation that DOD establish a timeline to complete importing quality measure-related data from MHS Genesis into the MHS Core Dashboard data system. During the department's review of our draft, DOD concurred with our recommendation and established a timeline for importing data for each of the measures and target dates for posting on the MHS Core Dashboard no later than May 2021. We reviewed the information that DOD provided in December 2020, agreed that DOD's actions met our draft recommendation, and therefore removed the recommendation from our final report. Implementing this timeline will help assure that MTFs using MHS Genesis have the information needed to identify and respond to quality of care concerns.

We are sending copies of this report to the appropriate congressional committee and the Secretary of Defense. In addition, the report is available at no charge on the GAO website at <a href="https://www.gao.gov">https://www.gao.gov</a>.

If you or your staff have any questions about this report, please contact me at (202) 512-7114 or <a href="mailto:DraperD@gao.gov">DraperD@gao.gov</a>. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix IV.

Debra A. Draper Director, Health Care

WIM

# Appendix I: Military Health System Core Dashboard Measures and the Organizations That Maintain Them

The Military Health System's (MHS) Core Dashboard tracks and displays information on the quality of care in the Department of Defense's (DOD) direct care system of military treatment facilities (MTFs) using a number of quality care measures. DOD officials use the Core Dashboard to establish accountability across MTFs and identify areas where quality improvement is needed.

Many of the measures included in the Core Dashboard were created and are maintained by national organizations, such as the National Committee for Quality Assurance, that are responsible for making any necessary updates to the measures.<sup>1</sup> The MHS Core Dashboard includes those measures that DOD officials say best align with its "Quadruple Aim" goals of better care, better health, lower costs, and improved readiness.<sup>2</sup>

As part of its efforts to support transparency on the quality of care between health care providers, health care organizations, and the public, DOD publicly reports some of its Core Dashboard measures through

<sup>&</sup>lt;sup>1</sup>The National Committee for Quality Assurance is a nonprofit organization that accredits health plans and develops quality standards and performance measures for them. The National Committee for Quality Assurance designed the Healthcare Effectiveness Data and Information Set (HEDIS) which is used by health plans in the United States to report health care quality.

<sup>&</sup>lt;sup>2</sup>The Core Dashboard does not contain all of the measures that officials use to monitor quality of care across the MHS; there are several other measures that DOD officials may use. For example, officials told us DOD has a HEDIS dashboard that includes the HEDIS measures that are found on the Core Dashboard, as well as other HEDIS measures that officials may monitor.

DOD's Transparency Wizard, DOD's Sentinel Events Report, and the Centers for Medicare & Medicaid Services' Hospital Compare.<sup>3</sup>

See table 4 for a list of the quality care measures included on the MHS's Core Dashboard, including the organizations that create and maintain the measures, definitions, and whether data on the measure are publicly reported. A little less than half (26) of the 59 measures were created by 10 different organizations, including government agencies and national not-for-profit organizations that support and monitor health care quality, such as the Institute for Healthcare Improvement and The Joint Commission. The remaining measures (33) were created by DHA. Some of the DHA-created measures assess readiness, such as the percentage of servicemembers meeting medical readiness requirements, and are used to determine whether individuals can deploy in support of military operations; and some measures focus on cost and utilization, such as retail pharmacy spending and overall hospital occupancy rate.

<sup>&</sup>lt;sup>3</sup>The DOD Transparency Wizard is a website that allows the public to review how MTFs score on standard measures related to patient safety and quality of care, among other topics. The DOD's Sentinel Events Report provides a summary of events, by MTF, that result in harm to a patient and require immediate reporting, response, and investigation by medical staff. Hospital Compare is a website created by the Centers for Medicare & Medicaid Services that has information on over 4,000 hospitals across the United States, including over 50 MTF hospitals, that the public can use to find hospitals and compare the quality of care those hospitals provide. DHA provides Hospital Compare with data on patient experiences, such as if patients would recommend the hospital, and on process of care measures, such as the average time a patient waits for an EKG in the emergency department.

Organization maintaining measure	Measure names	Definition	Public reporting location (if applicable)
Agency for Healthcare Research and Quality	Get care when needed	Percentage of patients who agree they are generally able to see their provider when needed.	DOD Transparency Wizard
Agency for Healthcare Research and Quality	Outpatient provider communication	Percentage of patients that believe that their healthcare provider always does certain actions, including listening to them carefully, respecting what they had to say, explaining things in a way they could understand, and spending enough time with them.	
Agency for Healthcare Research and Quality	Primary Cesarean- section	Rate of first-time Cesarean-section deliveries without a hysterectomy per 1,000 deliveries, excluding deliveries with complications, such as breech procedure or preterm delivery.	DOD Transparency Wizard
American College of Surgeons	National Surgical Quality Improvement Program 30- day all cases morbidity	Rate of complications, such as surgical site infection, pneumonia, or acute renal failure that occur within 30 days after a surgery.	DOD Transparency Wizard
American College of Surgeons	National Surgical Quality Improvement Program 30- day all cases mortality	Rate of deaths that occur within 30 days of a surgery.	DOD Transparency Wizard
California Maternal Quality Care Collaborative	Unexpected newborn complications	Rate of newborns who experienced unexpected severe or moderate complications, such as death, transfer to another hospital for a higher level of care, or infections that require a longer time in the hospital, per 1,000 healthy singleton, term births.	
Centers for Disease Control and Prevention	Catheter-associated urinary tract infection - standardized infection ratio	Risk-adjusted rate ratio comparing the rate of catheter-associated urinary tract infections at Department of Defense (DOD) hospitals relative to the rate at other hospitals participating in the CDC's National Healthcare Safety Network (NHSN).	DOD Transparency Wizard
Centers for Disease Control and Prevention	Central line-associated bloodstream infection - standardized infection ratio	Risk-adjusted rate ratio comparing the rate of central line- associated bloodstream infections at DOD hospitals relative to the rate at other hospitals participating in the CDC's NHSN.	DOD Transparency Wizard
Centers for Disease Control and Prevention	Population-based health related quality of life	Percentage of beneficiaries reporting that their current health is good.	
Centers for Medicare and Medicaid Services	Recommend hospital	Percentage of patients that would definitely recommend the hospital where they received care.	DOD Transparency Wizard, CMMS Hospital Care
Institute for Healthcare Improvement	Average number of days to third next available future primary care appointments	Weighted average of the number of days until the third next routine appointment is available with any primary care provider in a clinic's schedule.	DOD Transparency Wizard

Organization maintaining measure	Measure names	Definition	Public reporting location (if applicable)
Institute for Healthcare Improvement	Average number of days to third next available 24 hour primary care appointments	Weighted average of the number of days until the third next 24-hour appointment is available with any primary care provider in a clinic's schedule.	DOD Transparency Wizard
The Joint Commission	Unintended retained foreign object	Number of times that an object used for surgery was accidentally left in a patient during a surgical procedure.	DOD Sentinel Events Report
The Joint Commission	Wrong site surgery	Number of times that a surgical procedure was performed on the wrong patient, or a patient had surgery done on the wrong site of their body or the wrong type of surgery was done.	DOD Sentinel Events Report
National Committee for Quality Assurance	Appropriate testing for pharyngitis <sup>a</sup>	Percentage of patients 3 years and older who (1) received a diagnosis of pharyngitis and were prescribed an antibiotic at an outpatient visit and (2) were tested for streptococcus within three days of the visit.	DOD Transparency Wizard
National Committee for Quality Assurance	Breast cancer screening	Percentage of women aged 52 to 74 who had a mammogram in the previous 27 months.	DOD Transparency Wizard
National Committee for Quality Assurance	Cervical cancer screening	Percentage of women aged 24 to 64 who had either cervical cancer screening in the past 3 years or cervical cancer screening and human papillomavirus co-testing in the past five years, where the woman was age 30 or greater at the time of the co-test.	DOD Transparency Wizard
National Committee for Quality Assurance	Colorectal cancer screening	Percentage of adults aged 51 to 75 who had colorectal cancer screening at an appropriate interval, dependent upon screening method.	DOD Transparency Wizard
National Committee for Quality Assurance	7-Day mental health follow- up after hospitalization	Percentage of patients ages 6 and older who were hospitalized for treatment of selected mental illness diagnoses and who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 7 days of discharge.	DOD Transparency Wizard
National Committee for Quality Assurance	Diabetes A1c testing	Percentage of adults aged 18 to 75 with Type 1 or Type 2 diabetes who had at least one hemoglobin A1c test performed during the past 12 months.	DOD Transparency Wizard
National Committee for Quality Assurance	Plan all-cause readmissions for direct care	Number of acute inpatient hospital stays during the measure period for beneficiaries aged 18 to 64 that were followed by an unplanned readmission for any diagnosis within 30 days, adjusting for the predicted chance of an acute readmission.	
National Committee for Quality Assurance	Use of imaging studies for low back pain	Percentage of adults aged 18 to 50 with a primary diagnosis of low back pain who did not have an imaging study (plain X-ray, magnetic resonance imaging, or computed tomography scan) within 28 days of diagnosis.	DOD Transparency Wizard
National Committee for Quality Assurance	Well child visits in first 15 months of life	Percentage of children who reached the age of 15 months during the measurement period and had six or more Well-Child visits during the first 15 months of life.	DOD Transparency Wizard

#### Appendix I: Military Health System Core Dashboard Measures and the Organizations That Maintain Them

Organization maintaining measure	Measure names	Definition	Public reporting location (if applicable)
National Perinatal Information Center	Postpartum hemorrhage	Rate of women who experienced hemorrhage during or after delivery.	
PCPI Foundation	Cessation counseling amongst tobacco users <sup>b</sup>	Percentage of tobacco-using patients aged 18 and older (or pregnant at any age) that received tobacco cessation counseling during the measurement year.	
PCPI Foundation	Tobacco use <sup>b</sup>	Percentage of patients aged 18 and older (or pregnant at any age) that have screened positive for using tobacco during the measurement year.	
Defense Health Agency- Developed	Accreditation Council of Graduate Medical Education (ACGME) accreditation status	Percentage of eligible MHS residency programs that are accredited by ACGME.	
Defense Health Agency- Developed	Accreditation for DOD clinical laboratories by the College of American Pathologists	Percentage of accreditation inspection deficiencies identified by the College of American Pathologists for MHS facilities of a single service out of all accreditation inspection deficiencies nationally.	
Defense Health Agency- Developed	Active duty average days to primary care appointments	For active duty and guard/reserve servicemembers on active duty, the average amount of time between the date and time of the request for a primary care appointment to the appointment date and time.	
Defense Health Agency- Developed	Active duty average days to specialty care appointments	For active duty and guard/reserve servicemembers on active duty, the average amount of time between the date and time of the request for a specialty care appointment to the appointment date and time.	
Defense Health Agency- Developed	Active duty specialty care provider efficiency	Percentage of active duty specialty providers that exceed their target productivity.	
Defense Health Agency- Developed	All cause risk-adjusted inpatient mortality	Risk-adjusted rate of in-hospital deaths.	
Defense Health Agency- Developed	Ambulatory specialty care leakage	Among beneficiaries who are enrolled to an MTF for primary care, percentage of specialty care visits in private sector care that the MTF was capable of providing.c	
Defense Health Agency- Developed	Average number of days from MTF appointment booked to actual appointment date	Average number of days from when the specialty care referral was booked in the legacy electronic health record to when the initial specialty care appointment took place.	
Defense Health Agency- Developed	Direct care enrollees registered in secure messaging	Percentage of beneficiaries enrolled to an MTF for primary care who are enrolled to use secure messaging, which enables them to communicate with their primary care manager and/or health care team.	

#### Appendix I: Military Health System Core Dashboard Measures and the Organizations That Maintain Them

Organization maintaining measure	Measure names	Definition	Public reporting location (if applicable)
Defense Health Agency- Developed	Direct care secure messages responded to within 1 business day	Percentage of patient-initiated secure messages to MTF providers that were responded to within 1 business day.	
Defense Health Agency- Developed	Enterprise support activity benefit	The difference between actual (or forecasted) and planned benefit resulting from using enterprise, or DHA-wide, support activities, such as pharmacy and health information technology services.	
Defense Health Agency- Developed	Individual medical readiness (IMR)	Percentage of Armed Forces who meet IMR requirements, which determine whether a servicemember is medically able to deploy in support of military operations.	
Defense Health Agency- Developed	IMR deployment-limiting medical/dental condition (DLC)	Percentage of active servicemembers that are considered not medically able to deploy due in part or whole because of a DLC, which is any physical or psychological condition that may interfere with a servicemember's ability to perform duties while deployed.	
Defense Health Agency- Developed	Intensive care unit occupancy rate	The average percentage of an MTF's staffed intensive care unit beds that are occupied by patients.	
Defense Health Agency- Developed	Joint Commission accreditation	Percentage of MTFs accredited by The Joint Commission.	DOD Transparency Wizard
Defense Health Agency- Developed	Medical Evaluation Board stage performance	Number of calendar days to complete the Medical Evaluation Board stage for Integrated Disability Evaluation System cases.	
Defense Health Agency- Developed	Obesity among active duty	Percent of active duty servicemembers who are obese.	
Defense Health Agency- Developed	Obesity among adults	Percent of enrollees aged 20 and older who are obese.	
Defense Health Agency- Developed	Obesity among children and adolescents	Percent of enrollees ages 2 to 19 who are obese.	
Defense Health Agency- Developed	Overall occupancy rate	The average percentage of an MTF's staffed hospital beds that are occupied by patients.	
Defense Health Agency- Developed	Overweight among active duty	Percent of active duty servicemembers who are overweight.	
Defense Health Agency- Developed	Overweight among adults	Percent of enrollees aged 20 and older who are overweight.	
Defense Health Agency- Developed	Overweight among children and adolescents	Percent of enrollees ages 2 to 19 who are overweight.	

Organization maintaining measure	Measure names	Definition	Public reporting location (if applicable)
Defense Health Agency- Developed	Per member per month growth rate in costs for TRICARE Prime enrollees	Percent increase in total health care costs for TRICARE Prime beneficiaries.	
Defense Health Agency- Developed	Potentially recapturable primary care leakage to the network	Among beneficiaries who are enrolled to an MTF for primary care, the percentage of primary care, urgent care, and emergency room visits in the private sector care network that are considered to be potentially recapturable.	
Defense Health Agency- Developed	Primary care manager continuity	Percentage of appointments where the patient was seen by his or her assigned primary care manager out of the total number of planned appointments.	DOD Transparency Wizard
Defense Health Agency- Developed	Private sector care growth in costs per TRICARE Prime enrollee	Percent increase in private sector care costs per TRICARE Prime beneficiary.	
Defense Health Agency- Developed	Providers meeting knowledge, skills, and abilities (KSA) standards for general surgery	Percentage of active duty general surgeons assigned to a military treatment facility (MTF) who meet or exceed the KSA readiness threshold.	
Defense Health Agency- Developed	Providers meeting KSA standards for orthopedic surgery	Percentage of active duty orthopedic surgeons assigned to an MTF who meet or exceed the KSA readiness threshold.	
Defense Health Agency- Developed	Referrals dispositioned within one business day	Total referrals dispositioned within one business day as a proportion of the total number of referrals ordered by the MTF.	
Defense Health Agency- Developed	Retail pharmacy spending	Percentage of pharmacy dollars spent in retail pharmacies by all beneficiaries	
Defense Health Agency- Developed	Total empanelment for each MTF	Number of beneficiaries enrolled to receive medical care at an MTF.	
Defense Health Agency- Developed	Total private sector care costs	Total dollars spent on private sector care for all TRICARE beneficiaries.	

Legend for Public Reporting Locations:

- ◆ Department of Defense's (DOD) Transparency Wizard
- O Centers for Medicare & Medicaid Services' Hospital Compare
- DOD's Sentinel Events Report

Source: GAO review of Department of Defense, Defense Health Agency information, Department of Defense Transparency Wizard website, Centers for Medicaid Services' Hospital Compare website, and the Department of Defense's Sentinel Events Report. | GAO-21-143

Notes: Measures with grey shading are those that address timely and effective outpatient care, or whether patients received specific steps or processes of care that have been shown to lead to better health outcomes.

<sup>a</sup>This measure replaced the measure "appropriate testing for children with pharyngitis".

<sup>b</sup>The tobacco cessation counseling and tobacco use measures are adapted from those created by the PCPI Foundation due to a data limitation in the MHS clinical record where it is not feasible to verify whether tobacco use screening occurred within the past 24 months. Given this limitation, the

Appendix I: Military Health System Core Dashboard Measures and the Organizations That Maintain Them

measures used by DHA do not align exactly with the intended specifications and cannot be used to compare to other organizations.

°To determine whether the service could have been provided in the MHS, a provider of that specialty must have provided care in the area in which the patient resides and the MTF has to have performed the service at least 15 times in the past 12 months.

# Appendix II: Analysis of Urgent Cardiology and Orthopedic Referrals at Selected Military Treatment Facilities (MTF)

As part of our audit work, we reviewed all urgent referrals (71) for cardiology and orthopedic care at four selected MTFs made between September 1, 2018 and August 31, 2019, for which Defense Health Agency (DHA) referral data did not include information to confirm beneficiaries had been seen by Department of Defense (DOD) specialists. These specialties represent two of the top three specialty care clinics with the highest proportions of urgent referrals to total referrals.¹ We selected the four MTFs, in part, for variation in branch of military service, geography, and specialty care clinic. Additionally, these MTFs were all using DOD's existing (legacy) electronic health record (EHR) system during the requested time period. See table 5 for more information on these referrals.

Table 5: All Cardiology and Orthopedic Urgent Referrals for Which Data Did Not Include Information to Confirm Whether Beneficiaries Had Seen a Department of Defense (DOD) Specialist, by Selected Military Treatment Facilities (MTF), Sept. 1, 2018 – Aug. 31, 2019

Category	Cardiology	Orthopedics	Total
MTF 1	3	2	5
MTF 2	26	18	44
MTF 3	17	4	21
MTF 4	na	1	1
Total	46	25	71

Source: GAO analysis of Defense Health Agency data. | GAO-21-143

<sup>&</sup>lt;sup>1</sup>We confirmed through referral data that all beneficiaries urgently referred to oncology, the third clinic with the highest proportion of urgent referrals to total referrals, had been seen by a DOD specialist.

Appendix II: Analysis of Urgent Cardiology and Orthopedic Referrals at Selected Military Treatment Facilities (MTF)

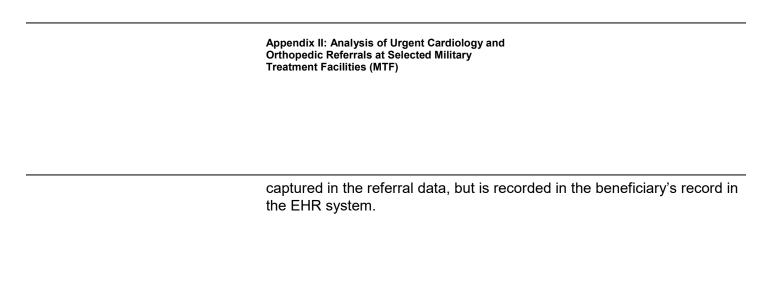
Note: We reviewed all urgent referrals to two of the top three specialty care clinics (cardiology and orthopedics) with the highest proportions of urgent referrals to total referrals, for which Defense Health Agency referral data did not include information to confirm beneficiaries had been seen by DOD specialists. We confirmed through referral data that beneficiaries urgently referred to the third top specialty care clinic, oncology, had been seen. We reviewed these data for four MTFs that we selected, in part, for variation in branch of military service, geography, and specialty care clinic. Further, the selected MTFs were all using the Department of Defense's existing (legacy) electronic health record system during the requested time period.

To confirm whether beneficiaries urgently referred to these two specialties had been seen by DOD specialists, we shared our selected urgent referrals and corresponding data with the selected MTFs and requested, among other things, they (1) confirm whether the beneficiary had been seen, (2) provide missing data (such as the appointment status), and (3) explain why it may have taken more than 72 hours (3 days) for a beneficiary to be seen, if applicable. Officials obtained the information from individual medical records in the legacy EHR system.

We found that beneficiaries had seen a DOD specialist for 61 of the 71 urgent referrals (86 percent). Below are some key takeaways from our analysis of the data:

- Of the 61 urgent referrals for which we confirmed beneficiaries had seen a DOD specialist,
  - More than half (65 percent) resulted in beneficiaries seen within 3 days.
  - For urgent referrals where it took beneficiaries longer than 3 days to be seen, time to care ranged from 4 to 42 days. Reasons given included (1) it took a few days to contact a beneficiary to schedule an appointment, and (2) a beneficiary requested a later appointment in order to be seen at a particular clinic.
  - Officials noted that four (6 percent) of the referrals were incorrectly prioritized as urgent.
- For the 10 urgent referrals for which beneficiaries had not seen DOD specialists, reasons for the absence of an appointment included that the beneficiary (1) chose not to seek care, (2) was transferred to another clinical service and the referral expired, and (3) felt the appointment was no longer necessary as the clinical issue had resolved itself.

Finally, when we asked about reasons why the referral data did not include information to confirm a beneficiary had been seen by a DOD specialist, MTF officials told us that this may be due to staff not correctly linking an appointment to the referral. As a result, the appointment is not



# Appendix III: Comments from the Department of Defense



#### **UNDER SECRETARY OF DEFENSE**

4000 DEFENSE PENTAGON WASHINGTON, DC 20301-4000

Debra A. Draper Director, Health Care U.S. Government Accountability Office 441 G. Street, N.W. Washington, DC 20548

DEC - 4 2020

Dear Ms. Draper:

Thank you for the opportunity for the Department of Defense (DoD) to review and respond to the recommendation contained in the Government Accountability Office (GAO) Draft Report, DEFENSE HEATLH CARE: Data System Improvements Could Help Ensure Beneficiaries Receive Timely and Effective Care (GAO-21-143).

The Department concurs with the recommendation contained in the report. A specific response to the GAO recommendation can be found in the attached document.

Again, thank you for the opportunity to review and respond to the recommendations. My point of contact for this issue is our GAO/DoD IG Liaison, Mr. Richard Legg-Benavides. Mr. Legg-Benavides can be reached at (703) 681-5922 or via email at richard.w.leggbenavides.civ@mail.mil.

Matthew P. Donovan

Attachment: As stated

#### GAO DRAFT REPORT DATED OCTOBER 23, 2020 GAO-21-143 (GAO CODE 103734)

"DEFENSE HEALTH CARE: DATA SYSTEM IMPROVEMENTS COULD HELP ENSURE BENEFICIARIES RECEIVE TIMELY AND EFFECTIVE CARE"

#### DEPARTMENT OF DEFENSE COMMENTS TO THE GAO RECOMMENDATION

**RECOMMENDATION 1**: The GAO recommends the Director of DHA should establish a timeline to complete importing quality measure-related data from MHS GENESIS into the MHS Core Dashboard data system.

**DoD RESPONSE**: DoD concurs. Elements needed to provide MHS GENESIS data to transitioned facilities include mapping of MHS GENESIS data, evaluation of workflows and knowledge of the system attributes, which are now sufficiently mature to begin a larger scale and more formal iterative approach to resolve and/or make recommendations for resolution of unavailable quality data results.

In order to complete this project, the DoD will sequentially address quality measures through the timeline in the table below. Starting in November 2020, DHA will continue mapping of files/codes and exam workflow documentation with clinical and technical representatives for select measures as pre-work for a formal deep dive. In December 2020, DHA will facilitate formal deep dives with clinical and technical representatives for the select measures beginning with Diabetes Hemoglobin A1C screening and breast cancer screening. Finally, in January 2021, an updated timeline will be set with milestones and goals each quarter to address the remaining measures. In parallel, DHA will continue to take steps to complete access to HealtheEDW and associated tools. HealtheEDW is the new enterprise data warehouse, which includes tools to visualize and analyze the data more easily, including easier data manipulation and aggregation through the HealtheAnalytics tools associated with our electronic health record. The combined efforts will allow DHA and MHS GENESIS facilities to visualize, monitor and utilize data to improve patient care.

Preliminary Results Made Available to MHS GENESIS Facilities	Projected Posting Date on MHS Dashboard	Quality Measure Under Review	Actions/Interim Steps Prior to Posting
DEC 2020	FEB 2021	Diabetes A1C Screening	December 2020: determination of issues with results, including: workflow (background with code or file matching or point of care entry/completion); reference tables
DEC 2020	FEB 2021	Breast Cancer Screening	December 2020: determination of issues with results, including: workflow (background with code or file matching or point of care entry/completion); reference tables
JAN 2021 or As Soon As Possible	MAY 2021 or earlier	7-Day Mental Health Follow-up	Pending outcome of DEC Workflow Testing
JAN 2021 or As Soon As Possible	MAY 2021 or earlier	Cervical Cancer Screening	Pending outcome of DEC Workflow Testing
JAN 2021 or As Soon As Possible	MAY 2021 or earlier	Appropriate Care for Pharyngitis: 2020 Name and Tech Spec Change	Pending outcome of DEC Workflow Testing
JAN 2021 or As Soon As Possible	MAY 2021 or earlier	Colon Cancer Screening	Pending outcome of DEC Workflow Testing
JAN 2021 or As Soon As Possible	MAY 2021 or earlier	Low Back Pain	Pending outcome of DEC Workflow Testing
Available Now	Available Now	PCM Continuity & Access Measures	Currently Available
JAN 2021 or As Soon As Possible	MAY 2021 or earlier	Tobacco Cessation Counseling	Pending outcome of DEC Workflow Testing
JAN 2021 or As Soon As Possible	MAY 2021 or earlier	Well Child Visits	Pending outcome of DEC Workflow Testing

# Appendix IV: GAO Contact and Staff Acknowledgments

#### **GAO Contact**

Debra A. Draper, (202) 512-7114 or draperd@gao.gov

#### Staff Acknowledgments

In addition to the contact named above, Ann Tynan (Assistant Director), Kaitlin Asaly (Analyst-in-Charge), Justin Cubilo, Jennifer Lucado, and Jennie F. Apter made key contributions to this report. Also contributing were Jacquelyn Hamilton, Eric Peterson, Dan Ries, and Ethiene Salgado-Rodriguez.

#### **Data Tables**

Accessible Data for Figure 1: Amount of Time It Took Beneficiaries to Access Specialty Care through Urgent Referrals, by Type of Specialty Care in All Domestic Military Treatment Facilities, Sept. 1, 2018 – Aug. 31, 2019

Specialty Care Service Line	Number of referrals	Min (calendar days)	25 <sup>th</sup> (calendar days)	50 <sup>th</sup> (calendar days)	75 <sup>th</sup> (calendar days)	Max (calendar days)
CARDIOLOGY	990	0	1	4	11	186
DERMATOLOGY	381	0	1	2	8	250
GASTROENTEROLOGY	458	0	2	5	10	355
GYNECOLOGY	374	0	2	5	14	177
MENTAL HEALTH	466	0	2	7	18	214
NEUROLOGY	459	0	1	5	12	341
OBSTETRICS	571	0	2	4	9	276
ONCOLOGY	108	0	4	7.5	18	173
OPHTHALMOLOGY	1499	0	0	1	2	272
ORTHOPEDICS	7595	0	1	2	5	273
OTOLARYNGOLOGY	967	0	0	2	5	222
PHYSICAL THERAPY	824	0	3	6	16	149
SURGERY	1346	0	1	4	8	136
UROLOGY	716	0	2	5	14	392
(National results across all specialties)	16754	0	1	3	7	392

Accessible Data for Figure 2: Amount of Time It Took Beneficiaries to Access Specialty Care through Urgent Referrals for Cardiology, Oncology and Orthopedics Nationally and at Four Selected Military Treatment Facilities (MTF), Sept. 1, 2018 – Aug. 31, 2019

Specialty Care Service Line	MTF	Number of referrals (calendar days)	Min (calendar days)	25 <sup>th</sup> (calendar days)	50 <sup>th</sup> (calendar days)	75 <sup>th</sup> (calendar days)	Max (calendar days)
Cardiology	National results	990	0	1	4	11	186
Cardiology	MTF A	63	0	1	7	14	52
Cardiology	MTF B	20	0	1	2.5	8.5	51
Cardiology	MTF C	84	0	2	5	11	126
Cardiology	MTF D	16	2	9.5	12	22	91
Oncology	National results	108	0	4	7.5	18	173
Oncology	MTF A	17	0	5	7	18	37
Oncology	MTF B	8	1	2	4	9	12
Oncology	MTF C	16	0	2.5	13	33	60
Oncology	MTF D	4	0	2.5	8.5	20	28
Orthopedics	National results	7595	0	1	2	5	273
Orthopedics	MTF A	164	0	3	6	14.5	143
Orthopedics	MTF B	141	0	2	4	6	115
Orthopedics	MTF C	677	0	0	1	3	134
Orthopedics	MTF D	80	0	2	4.5	7	40

Accessible Data for Figure 3: Rates of Beneficiaries Receiving Timely and Effective Care at Military Treatment Facilities (MTF) Compared to National Median, April 2020

Measure	MHS Median	National Median
7-day mental health follow-up	67.1	45.2
Breast cancer screening	75.1	73.8
Cervical cancer screening	79.9	75.7
Colorectal cancer screening	76.1	65.2
Diabetes A1c screening	89.1	91.5
Low back pain	82.8	76.5
Well child visits	86.7	83.3

Accessible Data for Figure 4: Rates of Beneficiaries Receiving Timely and Effective Care at Selected Military Treatment Facilities (MTFs) Compared to National Median, April 2020

Measure	MTF 1 (NMC San Diego)	MTF 2 (Walter Reed)	MTF 3 (Womack)	MTF 4 (Wright- Patterson)	National Median
7-day mental health follow- up	77.98	69.71	63.01	53.00	45.19
Breast cancer screening	79.29	80.42	82.68	72.20	73.83
Cervical cancer screening	82.81	82.08	85.09	73.57	75.72
Colon cancer screening	73.80	75.42	82.36	74.33	65.21
Diabetes A1c screening	88.89	90.37	91.80	92.38	91.48
Low back pain	77.39	85.13	79.67	85.02	76.5
Well child visits	89.30	89.59	92.18	93.05	83.25

#### **Agency Comment Letter**

## Accessible Text for Appendix III Comments from the Department of Defense

#### Page 1

DEC - 4 2020

Debra A. Draper Director, Health Care U.S. Government Accountability Office 441 G. Street, N.W. Washington, DC 20548

Dear Ms. Draper:

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Matthew P. Donovan

Attachment: As stated

#### Page 2

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#### Page 3

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